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## Quarter Report 2010

### HIGHLIGHTS

#### CHAIRMAN'S REVIEW

- Structural change in the zinc industry

#### ANGAS ZINC MINE

- Record mill throughput of 106,489 tonnes
- Total concentrate production exceeds forecast
- Cash operating margin increased despite higher costs

#### EXPLORATION

- Successful first stage drill program on old mines in Angas region
- Early follow-up drilling planned
- Major helicopter VTEM survey underway

#### OUED AMIZOUR PROJECT

- All onsite work for the Definitive Feasibility Study (DFS) now completed
- Mine design for the block cave well advanced

#### FINANCE

- Majority of zinc price exposure for June quarter fixed to underpin cash margin

#### CORPORATE

- Sempra to convert US\$5.0 million of notes - reduces debt level

#### FOCUS ON ZINC



#### DURABLE

Zinc extends the life cycle of steel and reduces maintenance costs



# CHAIRMAN'S REVIEW

Terramin has experienced a solid start to the year, with Angas Mine production generally in line with forecasts for the first quarter. Zinc and lead prices peaked early in the quarter and we took the opportunity to lock in forward prices for our zinc shipments to underpin our cash flows for the first half. A number of factors led to higher unit cash costs in the quarter, however costs remain in line with internal forecasts. The 2010 mine plan incorporates lower grade ore in the first half, compensated by higher grades later in the year, and therefore concentrate production and unit costs are expected to be maintained at a level in line with forecast. It is important to note that the cash margin during the quarter increased to US52 cents/lb.



With the development of the Angas Mine confirming the potential for low cost orebodies in the Fleurieu area, the challenge now is to find and develop more mines. The first exploration results from the Angas region have been very encouraging, particularly for gold and copper-gold. These will be followed up in the coming months, while a helicopter geophysical survey which commenced late in the quarter is expected to identify additional zinc and copper targets.

Tala Hamza has the right technical profile to become a long-term low cost producer. As the pre-feasibility study was largely conducted at feasibility standard, the technical feasibility of the project was well established. The current studies, due for completion during the third quarter, are focusing on optimizing the design of the plant, declines and mining plan following the substantial Mineral Resource upgrade in November 2009.

We have been advancing financing options so as to enable the decision to mine, expected in the third quarter, to include indicative terms to cover the proposed debt portion of the ultimate financing requirement. Further discussions with a major Algerian bank have confirmed their interest in financing the major capital requirement, which will be progressed following the conclusion of the current studies in the second quarter.

Recently I addressed the Third International Zinc Conference in Dubai, updating an international audience on the development of the Tala Hamza mine. There were addresses by a number of analysts predicting a supply shortfall for zinc in the medium to long term. However, their major emphasis was the potential near term price impact of zinc stockpiles on the exchanges, and what they perceive to be further zinc stocks held off-exchange. Their view is that the metal on the stockpile is at risk of being sold into market and therefore likely to depress prices at some point in the near future. I have discussed this at length with Michael Kennedy, our director with substantial experience in zinc trading and marketing. We present here some results that are of relevance to shareholders in considering their investment and Terramin's strategy.

Firstly, there has been a structural change in the zinc business over the past five years where a large proportion of produced metal now goes through LME warehouses rather than direct sales to end-user. This has resulted in a probably permanent uplift in the reported stock levels. To get this material from the LME warehouse end-users must now pay all of the delivery costs of around US\$60 per tonne.

Some 72% of current LME stocks of around 550,000 tonnes are located in US warehouses (New Orleans, Chicago, Detroit), so it is extremely expensive to take this material off warrant and then ship to consumers who are now concentrated in Asia. The metal is effectively "locked-in" owing to its location, unless a very high premium can be obtained.

Secondly, another issue is that most of the metal in the warehouses is on warrant under financing deals. As long as there is a forward pricing contango there is no incentive for the warrant holders to cash out. This contango return on funds invested provides a very competitive financial return when compared to other financial assets such as government bonds or prime bank lending.



Finally, the new dynamic is the increasing involvement of investment funds in hard commodities backed by physical metal, most of the metal being held in terminal market warehouses. This new dynamic is locking increasing amounts in warehouses as funds take a view on demand exceeding supply in a few years, resulting in deficits.

No one knows the proportion of stock devoted to these new investment requirements, nor the time frame under which they will be held, but it is likely to be several years. It is, therefore, naïve of some analysts to propose that such investors would sell on market while prices are low. The opposite is more likely, that they will be buying for the future. Indeed, that is apparently what is supporting prices at this time of weaker physical demand. The problem for analysts who tabulate outputs and consumption is that they have no way of assessing the extent of this investment support, since the most of the metal remains in warehouse.

Chinese stockpiles are reportedly growing, but it is unlikely that the mainly government holders will force down prices deliberately as it would impact their own domestic mining and smelting business and employment in those industries. They are likely to be as motivated by the prospect of future returns as the investment funds referred to above. The Chinese consider these commodity stockpiles as a strategic investment, plus a small but useful diversification of their reserves into assets other than US Treasuries. In summary, we may be witnessing a shift in baseline stock levels that will be confirmed if metal prices are supported through the rest of 2010.

Analysts also face uncertainty predicting the demand growth, as was obvious in the middle of the last decade when the Chinese economy started to accelerate. Indications are that supply and demand is finely balanced for zinc and many commodities now, so to what extent might unexpected demand growth overwhelm the predictions of analysts over the coming years? I put this question to a respected analyst who presented a cautious analysis of zinc demand at the conference and he admitted it was certainly a possibility.

It is not, however, necessary to invoke a new source of demand, like major growth in India, but look to a possible major effect on zinc consumption from within China. Current Chinese steel galvanizing capacity is 46 million tonnes of steel, operating at 60% capacity, and consuming 2.24 million tonnes of zinc. An increase in utilization to 80% would require no extra investment but increase zinc consumption by 750,000 tonnes, which is roughly equivalent to the presumed stockpile in the country.

This analysis does suggest that the supposed stockpiles are not a source of concern for zinc prices, and the continued price support at about US100 cents/lb may be seen as corroborating it. However, the existing zinc supply is likely to be overwhelmed by the predicted doubling of Chinese galvanized steel production over the next five years. This would require another 2.5 million tonnes of zinc supply for that purpose alone, against a backdrop of mine closures and expensive replacement through project development.

I believe the problem for the zinc industry will be to find and develop low cost mines to ensure supply is adequate and prices remain strong but at competitive levels. Terramin is a leader in the search for and development of mines to address the supply shortfalls and preserve shareholder value through all phases.

I look forward to reporting more success.

**Kevin Moriarty**  
*Executive Chairman*



# ANGAS ZINC MINE

The Angas Zinc Mine is 100% owned by Terramin. ML6229 is located 2km outside the town of Strathalbyn, 60 km from Adelaide, South Australia.

Probable Reserves of 2.15 million tonnes at 10.5% Pb+Zn are sufficient for a five year operation at current production rates. Situated in prospective ground in an historical mining belt, further exploration on the Company's tenements could potentially lead to an increase in production and an extension of mine life.

## Safety, Environment and Community report

Safety performance at the Angas Mine saw two lost time injuries being recorded during the March quarter. A site wide audit of Occupational Health and Safety management systems was performed during the period with external consultants providing positive feedback on all current initiatives for safety and procedures at the mine site.

A number of minor environment and community reports relating to normal operating activity around the mine were addressed satisfactorily by staff and communicated to the local community.

The high level of water in the tailings storage facility is a continuing issue that is being addressed by a study of the overall water balance across the mine site, and consultants have been engaged to prepare a plan to reduce the levels.

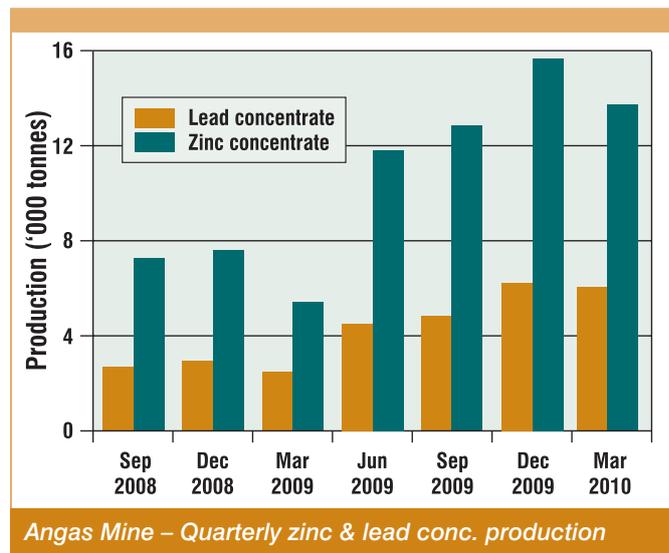
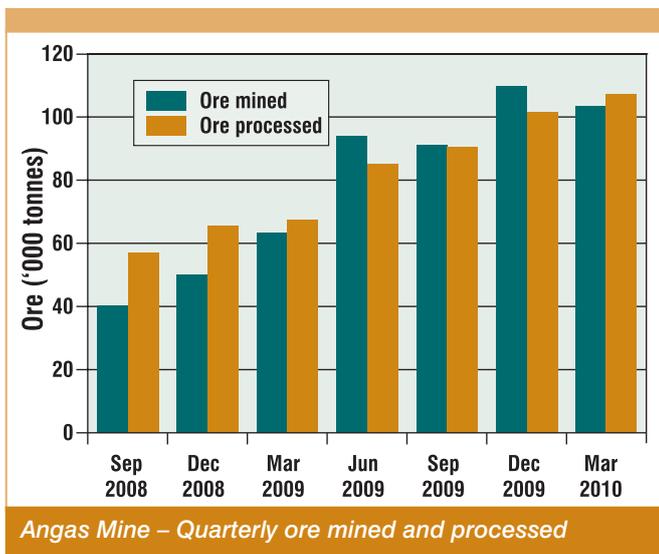
## Operations summary

The Angas Mine continued to operate in line with expectations during the quarter with a total of 102,423 tonnes mined, which was in line with the December quarter. Mill throughput exceeded name plate capacity setting a record of 106,489 tonnes in the period. The record was achieved despite two scheduled shutdowns for mill relines and associated work.

Underground mine development advanced 764 metres for the three months with the decline reaching 220 metres below surface. Several power outages at the mine site restricted development activities for short periods of time.

Total concentrate production of 19,650 tonnes exceeded the forecast provided in the December quarterly report (18,500 tonnes). However, the mix of concentrate output differed to forecast with lead concentrate output 33% above expectations and zinc concentrate production 2% lower than expected. The key reasons for the differences were higher lead grade and lower zinc grades. Metal recoveries for the period were 87.5% and 87.8% for zinc and lead respectively, in line with forecast. Payable zinc metal output was 6,019 tonnes with lead output of 3,066 tonnes.

The mine backfilling project neared commissioning at the end of the quarter. When operating normally the project will lead to a significant improvement in the management of the tailings facility and void management underground.





## Production statistics including C1 cash cost data

	March Quarter 2010	YTD 2010
<b>Production statistics</b>		
<b>Total ore mined (tonnes)</b>	<b>102,423</b>	<b>102,423</b>
<b>Total ore treated (tonnes)</b>	<b>106,489</b>	<b>106,489</b>
Ore grade:		
– Zn%	7.63	7.63
– Pb%	3.47	3.47
– Cu%	0.25	0.25
– Ag g/t	32.4	32.4
<b>Zinc Concentrate (tonnes)</b>	<b>13,667</b>	<b>13,667</b>
Grade:		
– Zn%	52.0	52.0
Recovery:		
– Zn%	87.5	87.5
<b>Lead Concentrate (tonnes)</b>	<b>5,983</b>	<b>5,983</b>
Grade:		
– Pb%	54.2	54.2
– Cu%	3.5	3.5
– Ag g/t	472	472
– Au g/t	7.6	7.6
Recoveries		
– Pb%	87.8	87.8
– Cu%	80.2	80.2
– Ag%	81.9	81.9
<b>Payable metal</b>		
– Zn t	6,019	6,019
– Pb t	3,066	3,066
– Cu t	45	45
– Ag oz	81,243	81,243
– Au oz	1,148	1,148

## Costs

### C1 Cash Costs (US c/lb payable zinc)

<b>Production Costs</b>	<b>50</b>	<b>50</b>
- Mining	25	25
- Processing	18	18
- Other Site Costs	7	7
<b>Realisation Costs</b>	<b>43</b>	<b>43</b>
- Transport & Handling	10	10
- Zinc Treatment Charges	33	33
<b>Net By-product Credits</b>	<b>(45)</b>	<b>(45)</b>
<b>C1 Cash Cost</b>	<b>48</b>	<b>48</b>

Notes: The YTD payable metal figures include adjustments based on final invoice numbers where available. The ore mined figures are estimated based on tonnes trucked to the surface whilst the ore treated figures are calculated from a weightometer. Reconciliation between the mine and the mill continues.

C1 cash costs of US48 cents/lb for the quarter were in line with internal forecasts but were higher than the US31 cents/lb recorded for the December quarter. The margin (average realised zinc price less cash costs) on sales for the March quarter of US52 cents/lb was actually higher than the US49 cents/lb achieved in the December quarter.

Cost increases were due to several factors including a lower average zinc head grade, marginally lower tonnes mined, higher overhead costs due to preparation for paste fill and water handling, higher zinc smelter charges due to participation in a higher realised zinc price and lower by-product credits. The company expects C1 cash costs to be around US50 cents/lb for the balance of the year based on current market commodity prices.

Recently settled treatment charges for zinc concentrate will reduce costs by about US\$40 to US\$50 per tonne of zinc concentrate for all shipments in 2010.

## 2010 Forecast production

The Company expects the Angas Mine to perform in line with forecasts for the full year.

### Forecast production levels in tonnes for 2010

2010	Ore Milled	Lead concentrate	Zinc concentrate
Q2	95,000	4,500	11,500
Calendar year	400,000	18,000-20,000	48,000-50,000

## Sales

Total sales of zinc and lead concentrate for the quarter were 7,426 tonnes and 5,394 tonnes respectively.

## Commodity Prices

Average prices in US\$ per tonne	Zinc	Lead
March 2010 Quarter	\$2,289	\$2,221
December 2009 Quarter	\$2,214	\$2,293

## Average realised price

The average realised zinc price for the quarter was US\$2,201 per tonne, marginally below the quarterly average market price. This reflects our current pricing terms, which are set in advance of shipment. The timing of shipments over the course of a year can be quite variable (only one shipment in the March quarter) and together with our pricing terms impacts on the quarterly average realised zinc price. For the June quarter three shipments are forecast with almost 60% of the sales fixed at an average zinc price of over US\$2,400 per tonne.

The lead price realised for the quarter was US\$1,902 per tonne. This was below the average spot price primarily due to the downward revaluation of prior quarter sales which were subject to final pricing in the March quarter. All current period sales are provisionally priced at the prevailing price at the quarter end.



## ANGAS

### Exploration activity

A detailed ASX release by the company on 12 April 2010 (available on the company's website [www.terramin.com.au](http://www.terramin.com.au)) provided the results of a recently completed drill programme in the Preamimma district approximately 30km northeast of Angas. The programme was designed to target an historic mining area and followed recent local geophysical surveys. Excellent gold results returned from Lady Jane Prospect including 3m @ 11.1 g/t Au from 1m and 13m @ 3.2 g/t Au from 80m.

Encouraging anomalous copper-gold results were also obtained from Preamimma Mine.

The results of the drilling are extremely encouraging and steps are being taken to identify a drill rig and obtain the approvals to enable early follow up diamond drilling at these prospects.

A major helicopter borne Versatile Time Domain Electromagnetic (VTEM) and magnetic survey is currently being flown across a significant part of the company's tenements in the Fleurieu region of South Australia. The Company expects that the survey will identify a number of anomalies particularly in areas under recent shallow cover.



Following processing of the data from the survey and any required ground follow up, the anomalies will be prioritised with drilling planned in the second half of the year. The map shows the extensive area (shaded yellow) that will be flown for the survey.

## MENNINNIE ZINC PROJECT

The Menninnie Zinc Project in South Australia comprises a contiguous group of three tenements with participation by Terramin's wholly owned subsidiary, Menninnie Metals Pty Ltd: The Menninnie Dam Joint Venture (MDJV) between Menninnie Metals (24%) and Minerals and Metals Group (76%) on EL3640; the Nonning JV, where Menninnie Metals can earn up to 70% from Minotaur Operations Pty Ltd on EL3535 and the recently granted Kolendo Exploration Licence EL4285 owned 100% by Menninnie Metals. The tenements include the Menninne Dam lead zinc deposit with an Inferred Resource of 3.8Mt @ 7.2% Pb+Zn and 620 square kilometres of prospective ground in the Gawler Craton.

### Menninnie Dam JV

The project remains on care and maintenance pending notification from the Manager (Minerals and Metals Group) on the progress and outcome of the sale process announced in October 2008.

### Nonning and Kolendo

A short programme of targeted helicopter VTEM and aeromagnetics is planned to be flown over both tenements early in the second quarter. This will follow up IP anomalies identified in earlier surveys. The work is being coordinated with the survey over the Fleurieu region to minimise mobilisation costs.



The Oued Amizour Zinc Project is 100% owned by Western Mediterranean Zinc Spa (WMZ). Terramin is the operator of the project and has a 65% shareholding in WMZ. The other 35% is held by two Algerian government-owned companies: Enterprise National des Produits Miniers Non-Ferreux et des Substances Utiles Spa (ENOF) (32.5%) and Office National de Recherche Geologique et Minere (ORGM) (2.5%).

The project is based on the 68.6 million tonne Tala Hamza deposit however the exploration lease contains several lead-zinc prospects with the possibility of more discoveries.

Exploration Permit 5225PE is a 123 square km tenement situated in northern Algeria on the coast of the Mediterranean Sea, 15 km from the deep water port of Bejaia. In addition to its infrastructure advantages - roads, power, water, and labour force - the project is well positioned to supply feedstock to European smelters.

The most recent resource estimate (November 2009) at Tala Hamza gave a Measured and Indicated Resource of 51.1 million tonnes at 6.1% Pb+Zn, within a global Measured, Indicated and Inferred Resource of 68.6 million tonnes at 5.7% Pb+Zn.

Current studies envisage a first stage 2 million tpa mine producing 200,000 tpa of zinc concentrate and 40,000 tpa of lead concentrate. Studies are underway on mining up to 4 million tpa given the scale of the resource and potential for more discoveries nearby.

## Feasibility programme

All onsite activities are now completed and design work on the surface facilities, road access and tailings storage facility well advanced with draft drawings issued. Golder Associates are continuing with mine planning work, draw point spacing design, the material handling report, ventilation study and the block cave design. It is expected that this work will be completed before the end of June.

A seismic study that evaluated all of the major faults in the Bejaia region of Algeria was completed. The work was designed to consider the potential for significant seismic activity so that the infrastructure facility designs incorporate the correct design parameters.

A surveyor has been appointed to commence the cadastral study that will identify all the local landowners that will be impacted by the project. Identified landowners will be compensated according to local requirements.

Additional metallurgical test work on the expanded Measured and Indicated Resource is being undertaken to ensure that the metallurgical characteristics of all parts of the orebody are well understood before the commencement of mining.

Mining lease application documentation including the Environmental Impact Study and the Accident Risk Study has been translated and completed.

The WMZ Board will meet to approve the submission of the Mining Lease Application after the completion of the DFS in the third quarter.

## Financing

Positive discussions continued with a number of potential lending banks, including a large Algerian bank that is awaiting conclusion of the DFS to advance the process.

## Exploration

As previously indicated all onsite activities are now completed for the DFS. This will enable two drill rigs to resume exploration drilling outside the Tala Hamza deposit. One rig will initially concentrate on extending the deposit to the east and south while the second will follow up regional targets. Results from a stream sediment sampling programme currently underway will be integrated with earlier geochemical results from ORGM exploration to identify and prioritise targets. WMZ will be focussing in particular on shallow targets with the aim of increasing the mineral inventory to ensure a long life project.

## Expenditure

Expenditure on the Oued Amizour project over the period totalled \$3.9 million. All of the expenditure relates to the Tala Hamza DFS programme.



## Note Conversion

RBS Sempra Metals & Concentrates LLC (Sempra) has given notice to Terramin that it will convert 5.0 million US\$1.00 five year unlisted convertible notes previously issued to Sempra in June 2005. The notes will convert to equity following the nominated conversion date of 17 May 2010. The conversion will effectively reduce Terramin's outstanding debt and leave to company well placed to fund its future growth opportunities.

Sempra is welcomed back to the register as a supportive cornerstone investor in the Company.

## Hedging

A short dated US dollar hedging programme was implemented during the quarter in order to mitigate foreign exchange risk on US dollar denominated metal sales with fixed metal prices. At the end of the quarter US dollar sold forward against the AUD totalled US\$4.0 million at an average exchange rate of 0.8767.

Post quarter-end a lead hedging programme was implemented to mitigate quotational period pricing exposure stemming from prior month sales. As at the date of this report, a total of 1,370 tonnes of lead metal have been sold forward over the next three months at a price of US\$2,275 per tonne.

## Cash

The Company held cash totalling \$20.0 million at the end of March.

## CORPORATE INFORMATION

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### CAPITAL STRUCTURE

at 21 April 2010

**Shares on issue** ..... 158,388,667  
**Unlisted Options** ..... 15,886,630  
**Unlisted convertible/redeemable notes** ..... US\$30,050,000  
**and 2,263,529 notes at \$2.21 per share conversion** ..... \$5,002,400

### DIRECTORS

**Kevin C Moriarty**

*Executive Chairman*  
BSc (Hons), PhD, MAusIMM

**Michael H Kennedy**

*Director* BCom (Economics)

**Steve A Bonett**

*Director* BCom, LLB (Hons), AICD, SIA

**Peter Zachert**

*Director* BBus, MCom, MGeoscience,  
FCA, FAIM

**Bob Jones**

*Director* BAppSc, Dip. Prim Met

**Bryan Davis**

*Director* BSc (Tech), FAusIMM, MAICD

**Xie Yaheng**

*Director* MSc, Senior Engineer

**Kate E McKeough**

*Joint Company Secretary*

BA, BCom, LLB (Hons), GDLP

**Mark Terry**

*Joint Company Secretary* BACC, CPA

*The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Robert Singer. The information that relates to Angas Ore Reserves is based on information compiled by Mr Andrew Robertson. Both are Members of The Australasian Institute of Mining and Metallurgy. Mr Singer is Chief Geologist and a full time employee of Terramin Australia Limited. Mr Andrew Robertson was General Manager Operations of Terramin Australia Limited and a full time employee at the time of the estimate. Both have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources or Ore Reserves'. Mr Singer and Mr Robertson consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.*